

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,776	12/03/2001	Eric Latino	GES003/JTN	7102
7590 03/30/2005		EXAMINER		
James T. Nenniger c/o Piasetzki & Nenniger			TRAN, HIEN THI	
Suite 2308			ART UNIT	PAPER NUMBER
120 Adelaide S			1764	
Toronto, ON M5H 1T1 CANADA			DATE MAILED: 03/30/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	70					
	Application No.	Applicant(s)				
	09/998,776	LATINO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Hien Tran	1764				
The MAILING DATE of this communication Period for Reply	on appears on the cover sheet v	vith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR ITHE MAILING DATE OF THIS COMMUNICAT - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communicated if the period for reply specified above is less than thirty (30) day of If NO period for reply is specified above, the maximum statutory Failure to reply within the set or extended period for reply will, be any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	CION. CFR 1.136(a). In no event, however, may a tion. s, a reply within the statutory minimum of the period will apply and will expire SIX (6) MC y statute, cause the application to become a	a reply be timely filed birty (30) days will be considered timely. DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	n <u>06 January 2005</u> .					
2a) This action is FINAL . 2b)	This action is non-final.					
3) Since this application is in condition for a	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice up	nder <i>Ex parte Quayle</i> , 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-15</u> is/are pending in the applic	cation.					
4a) Of the above claim(s) <u>14</u> is/are withdo	rawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-13 and 15</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) <u>1-15</u> are subject to restriction a	nd/or election requirement.					
Application Papers						
9) The specification is objected to by the Ex	aminer.					
10)⊠ The drawing(s) filed on <u>03 December 200</u>	01 is/are: a) $igtie$ accepted or b)[objected to by the Examiner.				
Applicant may not request that any objection	to the drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the	correction is required if the drawin	g(s) is objected to. See 37 CFR 1.121(d).				
11)⊠ The oath or declaration is objected to by	the Examiner. Note the attache	ed Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 	uments have been received.					
3. Copies of the certified copies of the						
application from the International E	, -	· ·				
* See the attached detailed Office action for	a list of the certified copies no	t received.				
AMaahaa aasta)						
Attachment(s)	A) [] ladar 2	Summon /PTO 442)				
1) ⊠ Notice of References Cited (PTO-892) 2) ☑ Notice of Draftsperson's Patent Drawing Review (PTO-9-		Summary (PTO-413) (s)/Mail Date				
Information Disclosure Statement(s) (PTO-1449 or PTO/ Paper No(s)/Mail Date <u>4/4/02</u> .		Informal Patent Application (PTO-152)				

Page 2

Application/Control Number: 09/998,776

Art Unit: 1764

DETAILED ACTION

Election/Restrictions

- 1. Applicant's election without traverse of group I, claims 1-13, 15 in the reply filed on 1/6/05 is acknowledged.
- 2. Claim 14 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 1/6/05.

Priority

3. Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country.

Oath/Declaration

4. In the declaration filed 12/03/01, applicants listed the prior application CA 2338942, filed in Canada on February 28, 2001. However, applicant has not complied with the requirements of 37 CFR 1.63(c), since the oath, declaration or application data sheet does not acknowledge whether applicants are attempting to claim the benefit of the filing date of said prior application CA 2338942, e.g. no check mark is shown in the blank indicate Yes or No. A new oath, declaration or application data sheet is required in the body of which the present application should be identified by application number and filing date.

Drawings

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "58" (page 9, line 8).

Application/Control Number: 09/998,776 Page 3

Art Unit: 1764

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the drawings to comply with CFR 1.84(p)(5), e.g. they should include the reference sign(s) mentioned in the specification and vice versa.

Claim Objections

7. Claims 3-6, 13, 15 are objected to because of the following informalities:

In claim 3, lines 1-2 "said chamber includes at least two webs extending thereacross" should be changed to --said at least one web member includes at least two web members extending across said chamber--; in line 2 "webs" should be changed to --web members-- (see claims 4, 5, 6, 13 likewise).

In claim 15, line 7 "member" should be deleted (note line 4).

Appropriate correction is required.

Specification

8. The disclosure is objected to because of the following informalities:

Art Unit: 1764

On page 7, line 5 --or sealing gasket-- should be inserted before "24" (note page 4, line 18).

Appropriate correction is required.

9. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

- 10. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 11. Claims 1-13, 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 9 "said exhaust gases" has no clear antecedent basis. See claim 15 likewise.

In claim 2, it is unclear as to what structural limitation applicants are attempting to recite, which flow through area is considered "sufficient to prevent significant pressure drop".

In claim 3 it is unclear as to what structural limitation applicants are attempting to recite, whether said catalytic converter elements within each web are the same or said catalytic converter elements of one web are the same as the elements of other webs, also it is unclear as to what is intended by "elements ... the same", e.g. whether applicants are implied the size or the type of catalyst. See claim 4 likewise.

Application/Control Number: 09/998,776 Page 5

Art Unit: 1764

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 13. Claims 1-2, 6-9, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Morita et al (4,866,932).

With respect to claims 1, 15, Morita et al discloses a pollution control device comprising: a body 11 having a first portion 11a and a second portion 11b releasably connected together to form a chamber therebetween;

an exhaust gas inlet 13 on said body;

an exhaust gas outlet 15 on said body; at least one web member 21 across said chamber; and

a plurality of catalytic converter elements 27 held in said web member; wherein exhaust gases pass through said catalytic converter elements 27 when passing through said chamber from said inlet to said outlet (see, for example, Figs. 3-5; col. 3, line 12 to col. 4, line 12).

With respect to claim 2, since it is unclear as to what structural limitation applicants are attempting to recite as set forth above, it appears that the catalytic converter elements 27 of Morita et al define an exhaust gas flow through area which is considered to be sufficient to prevent significant pressure drop between the inlet and the outlet and therefore meets the instant claim.

Art Unit: 1764

With respect to claims 6-7, Morita et al discloses that the catalytic converter elements 21 are fixed in said web member 21 by nut and bolts 41 and therefore are capable of being replaced with new ones (col. 3, lines 50-54, col. 4, line 67 to col. 5, line 4).

With respect to claims 8-9, Morita et al discloses provision of a flow control means, such as an extension of the inlet pipe with closed end and bores which is considered as a baffle to improve a flow of exhaust gases through the chamber (col. 4, lines 28-39).

With respect to claim 15, Morita et al discloses that the web member 21 having openings 21a formed therein for holding the catalytic converter elements 27 (col. 3, lines 43-45).

Instant claims 1-2, 6-9, 15 structurally read on the apparatus of Morita et al.

Claim Rejections - 35 USC § 103

- 14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 15. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 16. The art area applicable to the instant invention is that of a pollution control device.

Art Unit: 1764

One of ordinary skill in this art is considered to have at least a B.S. degree, with additional education in the field and at least 5 years practical experience working in the art; is aware of the state of the art as shown by the references of record, to include those cited by applicants and the examiner (ESSO Research & Engineering V Kahn & Co, 183 USPQ 582 1974) and who is presumed to know something about the art apart from what references alone teach (In re Bode, 193 USPQ 12, (16) CCPA 1977); and who is motivated by economics to depart from the prior art to reduce costs consistent with the desired product characteristics. In re Clinton 188 USPQ 365, 367 (CCPA 1976) and In re Thompson 192 USPQ 275, 277 (CCPA 1976).

17. Claims 3-5, 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al (4,866,932) in view of Lane et al (5,611,198).

With respect to claims 3-5, the apparatus of Morita et al is substantially the same as that of the instant claims, but is silent as to whether more than one web member may be provided.

However, Lane et al discloses the conventionality of providing more than one web members, each holding a plurality of catalytic converter elements.

It would have been obvious to one having ordinary skill in the art to provide more than one web member as taught by Lane et al in the apparatus of Morita et al for supporting a plurality of catalyst converter elements so as to improve the purification of exhaust gases thereof.

With respect to claims 4-5, since it is unclear as to what structural limitation applicants are attempting to recite as set forth above, as best understood, apparently Lane et al discloses that the catalyst converter elements 22 and 23 are the same (deNOx catalyst) while the catalyst

Art Unit: 1764

converter elements 24 (oxidation catalyst) are different from that of elements 22 and 23 (col. 3, lines 5-58).

With respect to claims 11, 13, Lane et al discloses provision of at least one gas injection port 15 associated with a pump 17 for injecting HC into the chamber and facilitating a reaction causing a reduction of pollution (col. 2, lines 56-64).

It would have been obvious to one having ordinary skill in the art to provide a gas injection port as taught by Lane et al in the modified apparatus of Morita et al so as to add reducing agent into the exhaust gas to cause the reduction of pollution and conform with the type of the catalytic converter elements, e.g. deNOx catalyst, therein

18. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al (4,866,932) in view of Harris (5,026,438).

The apparatus of Morita et al is substantially the same as that of the instant claims, but fails to disclose a specific shape of the flow control means.

However, Harris discloses provision of a flow control device in formed of a conical baffle 45.

It would have been obvious to one having ordinary skill in the art to substitute the flow control device of Harris for the flow control device of Morita et al for the known and expected results of obtaining the same results in the absence of unexpected results.

19. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al (4,866,932) in view of Lane et al (5,611,198) as applied to claim 11 above, and further in view of Langen (5,456,079).

Art Unit: 1764

With respect to claim 12, Lane et al discloses provision of at least one gas injection port 15 associated with a pump 17.

It would have been obvious to one having ordinary skill in the art to select an appropriate type of device, such as blower or pump, for drawing the reducing agent into the exhaust gas in the apparatus of Morita et al as modified by Lane et al, on the basis of its suitability for the intended use as a matter of obvious design choice since both devices were art-recognized equivalents at the time the invention was made in drawings fluid into the chamber as evidenced by Langen, and therefore no cause for patentability here.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (571) 272-1454. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 1764

HT

March 28, 2005

Hen Tran

Hien Tran

Primary Examiner Art Unit 1764